EXHIBIT A

Seagate Redacted Version of Plaintiffs' Exhibit 20

From: Mark W Hall <mark.w.hall@seagate.com>

Sent: Friday, February 28, 2014 2:48 PM

To: Mary Shartle <mary.m.shartle@seagate.com>

<aubrey.muhlach@seagate.com>; Teresa Nykilchuk <teresa.nykilchuk@seagate.com>; Joshua Walti

<joshua.walti@seagate.com>; Joanne Chan <joanne.chan@seagate.com>;

Joni J Clark <joni.j.clark@seagate.com>; Jennifer L Bradfield

<jennifer.l.bradfield@seagate.com>

Subject:

Attach: SSG1351.14-1310US October2013 (M Hall Edits 2-28-14).pdf

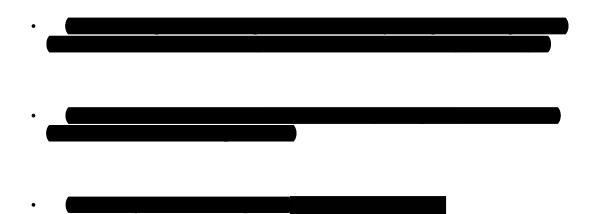
Best regards, Mark W. Hall Sr. Marketing Manager, Flash Portfolio Global Marketing

Seagate Technology - MS: SHK202 - 1280 Disc Drive - Shakopee, MN 55379

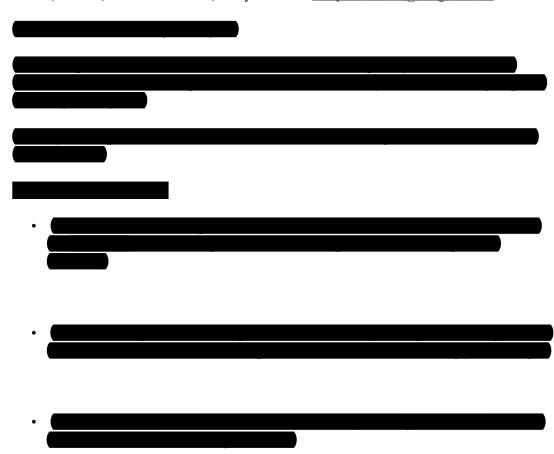
Cell: 612-244-5466 Office: 952-402-2987

On Thu, Feb 27, 2014 at 3:57 PM, Mary Shartle < mary.m.shartle@seagate.com > wrote:

Thanks, Mary



On Wed, Feb 19, 2014 at 1:21 PM, Mary Shartle < mary.m.shartle@seagate.com > wrote:



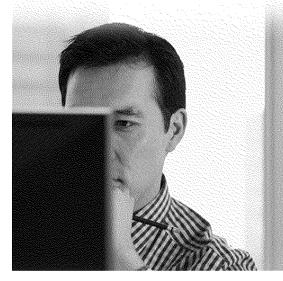
Thanks in advance for your help. Please let me know if you have questions.

Best,

Mary



Storage Solutions



Guide

OCTOBER 2013 | AMER



Make the perfect gift complete.



Complete your tablet with
1TB of storage to carry and stream 500+
movies or thousands of songs.
No internet required.



Wireless Plus Mobile Device Storage



www.seagate.com

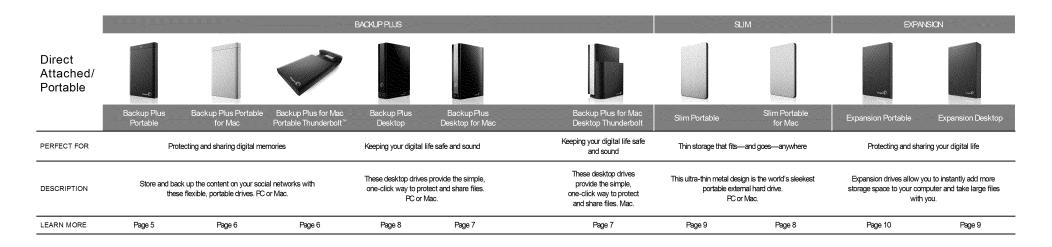
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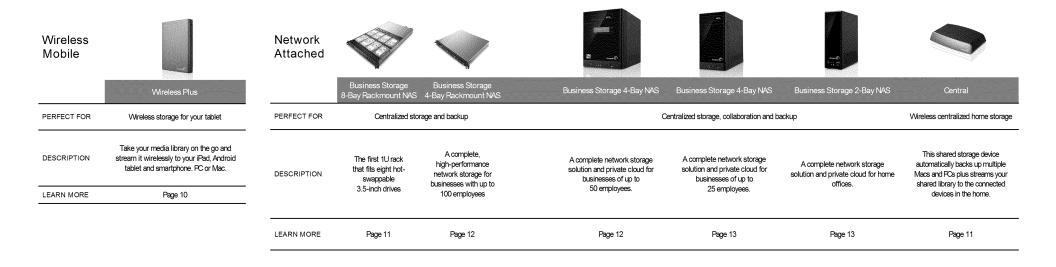
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External Storage

At-a-Glance Product Comparison





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External Storage Solutions

Seagate external storage solutions are sleek, dependable and ultra-portable products that let your customers automatically and continuously store digital family photos, protect critical business data, back up multiple computers on a small network, or share and store videos and music.

Backup Plus

The Backup Plus portable drive is the simple way to protect and share your entire digital life.

Key Advantages

- · Easy, flexible backups
- Automatically saves photos from social networks
- Photos and videos can be shared to social networks with a click
- Thunderbolt technology or FireWire 800 upgrade allows higher transfer speeds

Best-Fit Applications

- Store or back up photos, movies, music and documents.
- Download and save content that's posted on your social networks.
- Share your digital memories to your social networks with a click.

CAPACITY	KITNUMBER	INTERFACE	COLOR	œ
1TB	STBU1000100	USB 3.0	Black	PC, Mac
1TB	STBU1000101	USB 3.0	Silver	PC, Mac
1TB	STBU1000102	USB 3.0	Blue	PC, Mac
1TB	STBU1000103	USB 3.0	Red	PC, Mac
750GB	STBU750100	USB 3.0	Black	PC, Mac
PRODUCT DIMENSIONS	4.86-in L x 3.19-ii (123.4mm x 81.1i			
PACKAGE DIMENSIONS	5.2-in L x 1.81-in (132mm x 46mm			

EXTERNAL STORAGE





1 One gligatyte, or CB, equals one billion bytes and one terabyte, or TB, equals one billion bytes when referring to drive capacity 2.U.S. model numbers shown

Backup Plus for Mac

The Backup Plus portable drive for Mac is the simple way to protect and share your entire digital life.

Key Advantages

- · Mac OS and Time-Machine ready out of the box
- · Automatically saves photos from social networks
- · Share photos and video to social networks with a click.
- · Easily increase transfer speeds by upgrading to Thunderbolt technology.

Best-Fit Applications

- · Store or back up photos, movies, music and documents.
- · Download and save content that's posted on your social networks.
- · Share your digital memories to your social networks with a click.



Backup Plus Desktop for Mac

The Backup Plus desktop drive for Mac is the simple, one-click way to protect and share your entire digital life.

Kev Advantages

- · Mac OS and Time Machine ready right out of the box
- · Automatically saves photos from social networks
- · Share photos and video to social networks with a click.
- · Up to 3TB capacity for a lifetime of memories

Best-Fit Applications

- · Back up all your important files
- · Download and save content that's posted on your social networks.
- · Share your digital memories to your social networks with a click



EXTERNAL STORAGE

4TB	STCB4000901	USB 3.0		Black/ Silver	Mac, PC
3ТВ	STCB3000900	USB 3.0		Black/ Silver	Mac, PC
2TB	STCB2000900	USB 3.0	•	Black/ Silver	Mac, PC
PRODUCT DIMENSIONS	6.22-in L x 4.88-in W x 1.73-in D (158mm x 124mm x 44mm)				
PACKACE DIMENSIONS	7.87-in L x 9.06-in W x 3.54-in D (200mm x 230mm x 90mm)				

Backup Plus for Mac Portable Thunderbolt

The Thunderbolt Backup Plus for Mac portable drive is everything you need to transfer, store and back up files using Thunderbolt technology.

Key Advantages

- · Includes Thunderbolt cable, adapter and drive
- · Compatible with Time Machine software
- · Compatible with Thunderbolt devices
- · No external power supply required

Best-Fit Applications

- · Combine high-speed data transfer and high-definition display in a single interface
- · Unleash your creativity using high-bandwidth mediacapturing devices while processing in real time
- · Handle vast amounts of data more precisely than with any other connection

STORAGE SOLUTIONS GUIDE

· Back up and restore data at 10Gps



CAPACITY'	KIT NUMBER?	INT ERF ACE	COLOR	Œ
1TB	STB/V1000401	Thunderbolt	Black	Mac, PC
PRODUCT DIMENSIONS	5.12-in L x 3.19-i (130mm x 81mm			
PACKACE DIMENSIONS	6.69-in L x 5.24- (170mm x 133mm			

Backup Plus for Mac **Desktop Thunderbolt**

The Thunderbolt Backup Plus for Mac desktop drive is everything you need to transfer, store and back up files using Thunderbolt technology.

Key Advantages

- · Includes Thunderbolt cable, adapter and drive
- · Dual ports enable daisy-chaining up to six devices
- · Compatible with Thunderbolt displays and other devices
- · Compatible with Time Machine softwares

Best-Fit Applications

- · Combine high-speed data transfer and high-definition display in a single interface
- · Unleash your creativity using high-bandwidth mediacapturing devices while processing in real time
- · Handle vast amounts of data more precisely than with any other connection
- · Back up and restore data at 10Gbps



1 One gligabytie, or GB, equals one billion bytes and one terabyte, or TB, equals one trillion bytes when referring to drive capacity

Backup Plus Desktop

The Backup Plus desktop drive is the simple, one-click way to protect and share your entire digital life.

Key Advantages

- · Easy, flexible, built-in backup options
- · Automatically saves photos from social networks
- · Photos and videos can be shared to social networks with a click.
- · Up to 4TB capacity for a lifetime of memories
- · Increase transfer speeds by upgrading to Thunderbolt technology or FireWire 800.

Best-Fit Applications

- · Back up all your important files.
- · Download and save content that's posted on your social networks.
- · Share your digital memories to your social networks with a click.



CAPACITY'	KIT NUMBER INTERFAC	E COLOR OS
4TB	STCA4000100 USB 3.0	Black PC, Mac
3ТВ	STCA3000101 USB 3.0	Black PC, Mac
2TB	STCA2000100 USB 3.0	Black PC, Mac
1TB	STCA1000100 USB 3.0	Black PC, Mac
PRODUCT DIMENSIONS	6.22-in L x 4.88-in W x 1.73- (158mm x 124mm x 44mm)	in D
PACKACE DIMENSIONS	7.87-in L x 9.06-in W x 3.54- (200mm x 230mm x 90mm)	in D

Slim

The Seagate Slim portable drive is thin, light and the easiest way yet to back up the things that are important to you.

Key Advantages

- · Just slightly thicker than an iPhone
- · Protects your stuff with easy, flexible backups
- · Automatically saves photos from social networks
- · Photos and videos can be shared to social networks with a click.

Best-Fit Applications

- · Store or back up photos, movies, music and documents.
- · Download and save content that's posted on your social networks.
- · Share your digital memories to your social networks with a click.



(113.5mm x 76mm x 9.6mm)

(142mm x 31mm x 103mm)

DIMENSIONS

5.59-in L x 1.22-in W x 4.06-in D

EXTERNAL STORAGE

Slim for Mac

The Seagate Slim portable drive for Mac combines a thin, light form factor in a Time Machine-ready drive.

Key Advantages

- · Just slightly thicker than an iPhone
- · Mac OS and Time Machine ready out of the box
- · Automatically saves photos from social networks
- · Photos and videos can be shared to social networks with a click

Best-Fit Applications

- · Store or back up photos, movies, music and documents.
- · Download and save content that's posted on your social networks.
- · Share your digital memories to your social networks with a click.



CAPACITY	KII NUMBER	INI H-FACE	COLOR	CS
500GB	STOF500102	USB 3.0	Silver	Mac, PC
PRODUCT DIMENSIONS	4.47-in L x 2.99- (113.5mm x 76m			
PACKACE DIMENSIONS	5.59-in L x 1.22- (142mm x 31mm			

Expansion

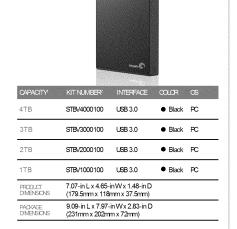
The Expansion desktop drive provides extra storage for your ever-growing collection of files.

Key Advantages

- · Simple and straightforward setup
- · No software to install and nothing to configure
- · Saving files is easy—simply drag and drop.
- · USB 3.0 interface allows fast transfer speeds.

Best-Fit Applications

- · Instantly add more storage space to your computer.
- · Improve performance on your computer's internal drive by freeing up space on your internal drive.



1 One gligabytie, or GB, equals one billion bytes and one terabyte, or TB, equals one trillion bytes when referring to drive capacity

Expansion

The Expansion portable drive is compact and perfect for taking large files with you on-the-go.

Key Advantages

- · Simple and straightforward setup
- · Powered from the USB cable
- · Saving files is easy—simply drag and drop.
- · USB 3.0 interface allows fast transfer speeds.

Best-Fit Applications

- · Instantly add more storage space to your computer.
- · Take large files with you when you travel.



Central

The Central shared network storage system allows you to create secure in-home cloud storage for multiple computers in the home.

Key Advantages

- Automatically back up multiple PC and Mac computers
- Wirelessly stream your centralized media library to gaming consoles, media players and smart TVs
- Access content on-the-go with a Web browser or the free app for tablets and smartphones

Best-Fit Applications

- · Consolidate content on one easily accessible device
- · Back up multiple PC and Mac computers
- Enjoy a centralized media library on smart TVs, game consoles and media players
- Access your content on-the-go with laptops and mobile devices
- · Archive your Facebook photos and videos



EXTERNAL STORAGE

CAPACITY ¹	KIT NUMBER?	INTERFACE	COLOR	œ
4TB	STCG4000100	SATA/GigE	Black	PC, Mac
3ТВ	STCG3000100	SATA/GigE	Black	PC, Mac
2TB	STCG2000100	SATA/GigE	Black	PC, Mac
PRODUCT DIMENSIONS	5.7-in L x 8.5-inWx 1.7-in D (145mm x 216mm x 42mm)			
PACKAGE DIMENSIONS	3.15-in L x 10.3- (80mm x 261mm			

Wireless Plus

With Wireless Plus mobile device storage, you can take your media library with you.

Stream it to your iPad or Android tablet.

Key Advantages

- · Take your media library with you on the go
- Share media with up to eight Wi-Fi enabled devices at the same time.
- · Use anywhere, without an Internet connection
- · Up to 10 hours battery life3

Best-Fit Applications

- · Store and carry movies and other media on the go.
- · Share media with others.

10

· Works with iPad or Android tablets and smartphones



Business Storage 8-Bay Rackmount NAS

A complete network storage solution with innovative 8-bay design in a 1U form factor that is perfect for growing businesses

Key Advantages

- A 2.3GHz dual-core Intel processor delivers file transfer performance of up to 200MB/s
- Wuala™ cloud service and apps for secure collaboration and anywhere access
- Centralized backup for PCs, plus Time Machine support for Mac computers
- Support for iSCSI enables maximum performance and compatibility for virtualized environments

Best-Fit Applications

- · Store business-critical files centrally and securely
- · Back up your organization's PC and Mac computers
- Access and manage files remotely using Internetconnected computers and devices
- Back up files to the cloud



CAPACITY ¹	KIT NUMBER?	INTERFACE	COLOR	œ	
32TB	STDP32000100	Gigabit Ethernet	Black	PC, Mac	
24TB	STDP24000100	Gigabit Ethernet	Black	PC, Mac	
16TB	STDP16000100	Gigabit Ethernet	Black	PC, Mac	
12TB	STDP12000100	Gigabit Ethernet	Black	PC, Mac	
8TB	STDP8000100	Gigabit Ethernet	Black	PC, Mac	
PRODUCT DIMENSIONS	30.394-in L x 1.7 (772mm x 43.5mi	13-inWx 18.78-in n x 477mm)	D		
PACKAGE DIMENSIONS	35.354-in L x 23.465-in W x 8.661-in D (898mm x 596mm x 220mm)				

1 One gigabyte, or GB, equals one billion bytes and one terabyte, or TB, equals one trillion bytes when referring to drive capacity 2 US, model numbers shown

STORAGE SOLUTIONS GUIDE

STORAGE SOLUTIONS GUIDE

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1

Business Storage 4-Bay Rackmount NAS

Centralize your storage and backups with a complete network storage solution that saves valuable floor space for small businesses.

Key Advantages

- * Centralized storage and backup for PCs and Macs, plus secure Wuala cloud off-site backup service
- * A dual-core Intel Atom processor and new. performance-optimized Seagate NAS OS deliver file transfer speeds up to 200MB/s
- · Anywhere access to your files
- * Hot-swappable drives and dual Gigabit Ethernet ports help increase up-time

Best-Fit Applications

- · Store business-critical files centrally and securely
- · Back up your organization's PC and Mac computers
- · Access and manage files remotely using Internetconnected computers and devices
- · Back up files to the cloud



CAPACITY	KIT NUMBER?	INTERFACE	COLOR	œ		
16TB	STDN16000100	Gigabit Ethernet	Black	PC, Mac		
12TB	STDN12000100	Gigabit Ethernet	Black	PC, Mac		
8TB	STDN8000100	Gigabit Ethernet	Black	PC, Mac		
4TB	STDN4000100	Gigabit Ethernet	Black	PC, Mac		
_	STDN100	Gigabit Ethernet	Black	PC, Mac		
PRODUCT DIMENSIONS	16.929-in L x 15-in W x 1.713-in D (430mm x 381mm x 42.5mm)					
PACKAGE DIMENSIONS	22.44-in L x 19.567-inWx 6.496-inD (570mm x 497mm x 164mm)					

Business Storage 4-Bay NAS

A complete, small-business-specific network storage solution designed to provide optimum uptime and data integrity for up to 50 workstations

Key Advantages

- * Easy 10-minute setup
- . Upload and download files with free apps for iPhone, iPad and Android devices
- * Full-system, automatic backup for PCs, plus Time Machine support for Mac computers
- * Customize performance and data redundancy with RAID 0, 1, 5 and 10 configuration options

Best-Fit Applications

- · Make automatic, continuous backups
- · Store files in a secure, central location
- · Access and manage files remotely using Internet-connected devices
- · Create cost-effective, private cloud storage

STORAGE SOLUTIONS GUIDE

· Encrypt individual files to entire volumes of data



CAPACITY'	KIT NUMBER	INTERFACE	COLOR	os –	
16TB	STBP16000100	Gigabit Ethernet	Black	PC, Mac	
12TB	STBP12000100	Gigabit Ethernet	Black	PC, Mac	
8TB	STBP8000100	Gigabit Ethernet	Black	PC, Mac	
4TB	STBP4000100	Gigabit Ethernet	Black	PC, Mac	
_	STBP100	Gigabit Ethernet	Black	PC, Mac	
PRODUCT DIMENSIONS	6.3-in W x 8.2-in H x 10.2-in D (161.00mm x 208.00mm x 258.50mm)				
PACKACE DIMENSIONS	9.4-in W x 14.9-in H x 9.4-in D (240.00mm x 379.00mm x 243.00mm)				

Business Storage 2-Bay NAS

Create a private cloud to help protect your business-critical data and centralize files in a single location you can access from anywhere

Key Advantages

- · Easy 10-minute setup
- · Upload and download files with free apps for iPhone, iPad and Android devices
- * Full-system, automatic backup for PCs, plus Time Machine support for Mac computers
- Customize performance and data redundancy with RAID 0 and 1 configuration options

Best-Fit Applications

- · Make automatic, continuous backups of multiple PC and Mac computers
- · Store files in a secure, central location
- · Access and manage files remotely using Internet-connected computers. tablets and smartphones
- · Create cost-effective, private cloud storage



EXTERNAL STORAGE

CAPACITY	KIT NUMBER?	INTERFACE	α	OLOR	œ
8TB	STBN8000100	Gigabit Ethemet	•	Black	PC, Mac
6TB	STBN6000100	Gigabit Ethernet	•	Black	PC, Mac
4TB	STBN4000100	Gigabit Ethemet	•	Black	PC, Mac
_	STBN100	Gigabit Ethernet	•	Black	PC, Mac
PRODUCT DIMENSIONS	4.1-inWx 8.0-in H x 8.9-in D (104.50mm x 204.00mm x 227.00mm)				
PACKACE DIMENSIONS	6.2-inWx 10.9-in H x 12.5-in D (157.00mm x 277.00mm x 317.00mm)				

Business Storage 1-Bav NAS

Create a private cloud with Seagate Business Storage 1-Bay NAS. It helps protect your allimportant data and centralizes your files in a single location you can access from anywhere.

Key Advantages

- · Easy 10-minute setup
- · Upload and download files with free apps for iPhone, iPad and Android devices
- * Full-system, automatic backup for PCs, plus Time Machine support for Mac computers
- · Stream your media library to networked computers, Internet TVs, game consoles and more

Best-Fit Applications

- · Make automatic, continuous backups of multiple PC and Mac computers
- Store files in a secure, central location
- · Access and manage files remotely using Internetconnected computers, tablets and smartphones
- · Create cost-effective, private cloud storage



CAPACITY'	KIT NUMBER?	INTERFACE	COLOR	œ
4TB	STBM4000100	Gigabit Ethernet	Black	PC, Mac
3ТВ	STBM3000100	Gigabit Ethemet	Black	PC, Mac
2TB	STBM2000100	Gigabit Ethernet	Black	PC, Mac
PRODUCT DIMENSIONS	2.4-inWx 6.9-in H x 5.8-in D (61mm x 176mm x 148mm)			
PACKAGE DIMENSIONS	3.7-inWx 9.3-in H x 9.0-in D (93mm x 236mm x 229mm)			

1 One glgabyte, or GB, equals one billion bytes and one terabyte, or TB, equals one trillion bytes when referring to hard drive capacity. 2 U.S. model numbers shown

STORAGE SOLUTIONS GUIDE

12

Internal Storage At-a-Glance Product Comparison

		ENIERRISE			DESKTOP		SPECIALTY	
3.5-inch								
	Cheetah® 15K	Enterprise Capacity 3.5 HDD	Terascale [™] HDD	Desktop SSHD	Desktop HDD	NASHDD	SV35 Series™	Video 3.5 HDD
USE THIS DRIVE FOR	High-capacity, compute- intensive requirements demanding high performance and availability	Bulk-data applications requiring reliable, highest- capacity storage efficiency and enterprise-class reliability	Cost-effective, low-power bulk storage solutions for unstructured data	Desktop solutions requiring SSD-like performance and massive capacities at an affordable price	Desktop compute where choice in capacity and cache options to provide design flexibility is important	Small NAS systems needing performance with high capacities. 3-year limited warranty	Surveillance systems that require high performance, low power and centralized storage or every surveillance application. 3-year limited warranty	DAR systems where reliable, low-power, purpose-built storage is required for video streaming applications. 3-year limited warranty
ENCRYPTION MODELS AVAILABLE	Х	Х						
LEARN MORE	Page 25	Page 26	Page 28	Page 32	Page 32	Page 42	Page 42	Page 43

		EOL'd Pro	oducts	ENTERPRISE SSHD		ENTERPRISE			MOBIL	E		SPECIALTY
2.5-inch	occuri	Date In the second seco										
	1200 SSD	600 Pro SSD	6(\0 /ssd	Enterprise Turbo SSHD	Enterprise Performance 15K HDD	Enterprise Performance 10K HDD	Constellation®	Laptop SSHD and Laptop Thin SSHD	Momentus® Thin	Laptop Ultrathin HDD	Ultra Mobile HDD	Video 2.5 HDD
USE THIS DRIVE FOR	Enterprise storage environments requiring high-capacity SSD with data integrity and drive endurance	Data center and cloud applications that require fast performance and low power	On-the-go users who need the fastest performance and improved ruggedness	Improved storage performance tier between SSDs and high-capacity HDDs	Compute-intensive data requirements demanding the highest HDD performance density and availability	Mainstream data requiring high capacity, performance density and reliability	Online reference data demands requiring cost- effective, low- power, enterprise- class drives	The ultimate mobile computing experience, with SSD-like performance for all applications and OS environments	Slim computing devices, such as laptops and netbooks	Slim laptops and devices that need light, affordable, high-capacity storage	Robust storage for high-capacity tablets and mobile applications	Video streaming where 24x7 operation, small form factor and low power consumtpion are needed, 3-year limited warranty
ENCRYPTION MODELS AVAILABLE		1	/ x \	х	Х	×	×		X	Х		
LEARN MORE	Page 18	Page 18	Page 19	Page 22	Page 22	Page 24	Page 27	Page 36	Page 36	Page 37	Page 37	Page 43

15 STORAGE SOLUTIONS GUIDE STORAGE SOLUTIONS GUIDE

Solid State Drive Solutions

Seagate is committed to the flash-based storage market, as is evident by its line of enterprise and client SSDs, engineered to deliver ultra-fast speed and high data integrity. Seagate is focused on the continuing technology leadership that allows it to be a premier supplier of both solid state drives and hard drives.



			EOL a Produ	CIS	00001
		OSC ***	Once in the control of the control o	60	o ssp
	Legacy Name				
⊑	Description	Ultra-fast, consistent performance for demanding enterprise storage and server applications	Fast performance and low power for performance-hundry data center and cloud applications	Speed up you performance	In laptop with SSD and ruggedness
riso	Form Factor/z-Height	2.5-inch/7mm	2.5-inch/7m/n	2.5-inch	/5mm,/7mm
ıpa	Reliability	0.44% AFR	0.58% AFTR	0.5	8% AFR
ωç	Capacity ¹	2000B to 8000B	1000B to 4800B	120Œ	3 to 480GB
Product Comparison	Endurance (total terabytes written over warranty period)	3650TB/V to 14,600TB/V	24TB/V to 1080TB/V	36.5TB	N to 78TBN
70	NAND Flash Type	MLC	ML¢		м/с
ш	Power (Idle)	2.72/V to 3.0/V	1.09W to 1.29W		1./w \
	Interface	12Gb/s SAS	SATA/6Gb/s	SAT	A 6Gb/s
	Limited Warranty ⁴	5 years	5 years	3	years
	Product	1200 SSD	600 Pro SSD	60	00 SSD
re	Self-Encrypting Drive (SED) Option ²	X			
Feature Comparison	FIPS 140-2 SED Option ^{2, 3}	X			
	Power Loss Data Protection	X	x \		

STORAGE SOLUTIONS GUIDE

SSD STORAGE

FOL'd Products

¹ One gigatyle, or GB, equals one billion bytes and one terabyte, or TB, equals one billion bytes when referring to drive capacity. 2 Self-Empring Dinne models may require 10'G-compliant had or controller support. 3 Some PTS in neview. See PTS 149 - Zusel 2 Centificate at this/face inst polylogusp-STM/comp/documents/140-17140'hend.htm. 4 Warrarb) terms may vary based on usage. Consult your Seagate sales representative for warrarby terms and conditions.

1200 SSD

The Seagate 1200 SSD delivers best-in-class performance and a rich enterprise feature set for demanding data center applications.

Key Advantages

- Helps remove storage bottlenecks and close the gap between processor and data access performance
- Delivers the speed and performance consistency needed for demanding enterprise applications
- Designed to reduce data access wait times under the most complex, write-intensive workloads
- Ensures data availability for critical production systems by using redundant, failover I/O communication paths

Best-Fit Applications

- Demanding enterprise applications with complex, write-intensive and mixed workloads
- IOPS-hungry enterprise applications, such as high-performance computing, online transaction processing and heavy data analytics
- · External enterprise storage solutions (SAN, NAS, DAS)



CAPACITY	MODEL	INTERFACE	NAND FLASH TYPE
800GB	ST800FM00532	SATA 12Gb/s	MLC
800GB	ST800FM0063 ^{2,3}	SATA 12Gb/s	MLC
400GB	ST400FM00732	SATA 12Gb/s	MLC
200GB	ST200FM00732	SATA 12Gb/s	MLC

600 SSD

The ultimate performance upgrade for existing laptops, the Seagate 600 SSD is a fast, rugged, 2.5-inch, SATA 6Gb/s solid state drive.

Key Advantages

- Nearly 4× faster boot times and over 2× faster application load times than typical laptop HDDs
- Significantly reduces the amount of time end users must wait before using their devices
- Allows end users to access data faster and to take advantage of superior laptop responsiveness
- The ultimate upgrade drive for road warriors, power users, executives and gamers—work and play faster

Best-Fit Applications

- Performance upgrade for existing laptops with 2.5-inch hard drives
- Improved ruggedness upgrade for existing laptops that may be dropped while operating
- · Data center caching



SSD STORAGE

_	CAPACITY	7MM Z-HT MODEL		NAND FLASH TYPE
	480GB	ST480HM000	SATA 6Gb/s	MLC
	240GB	ST240HM000	SATA 6Gb/s	MLC
	120GB	ST120HM000	SATA 6Gb/s	MLC

CAPACITY ¹	5MM Z-HT, MODEL	INTERFACE	NAND FLASHTYPE
480GB	ST480HM001	SATA 6Gb/s	MLC
240GB	ST240HM001	SATA 6Gb/s	MLC
120GB	ST120HM001	SATA 896/s	MLC

600 Pro SSD

A class above client SSDs, Seagate 600 Pro SSDs deliver a best-in-class combination of fast, consistent performance and low power.

Key Advantages

- Delivers the highest IOPS/watt to improve system performance and reduce power and cooling costs for data center and cloud applications
- Fast, consistent performance and low latency over the warranty period of the drive
- Helps reduce performance gaps between storage I/O and CPU operations

Best-Fit Applications

- Data center applications (fast data indexing, edge caching)
- · Data streaming

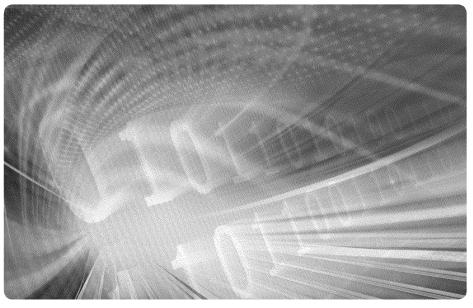
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- · Content delivery networks
- · Gaming and software delivery
- · Virtualization and other cloud applications

STORAGE SOLUTIONS GUIDE



	CAPACITY	MODEL	INTERFACE	NAND FLASH TYPE
\	480GB	ST480FP0021	SATA 6Gb/s	MLC
	400 6 B	ST400FP0021	SATA 6Gb/s	MLC
	240GB	ST240FP0021	SATA 6Gb/s	MLC
	200GB	ST200FP0021	SATA 6Gb/s	MLC
	120GB	ST120FP0021	SATA 6Gb/s	MLC
	100GB	ST100FP0021	SATA 6Gb/s	MLC



1 One graphyte or CB, equals one billion bytes and one tendate, or TB, equals one trillion bytes when referring to drive capacities (PS 1946 - Validated drives are not available in all models or countries. May require TDS compliant hast or controller support.
3 FPS 440-2 in review. See FPS 140-2 Level 2 Certificate at http://sex.orst.gov/groups/STM/dmps/validation.html

quie 103-compliant hast or controller support.

10-2 in review. See FFS 140-2 Level 2 Certificate at http://csrc.nist.gov/groups/STM/crmp/validation.html

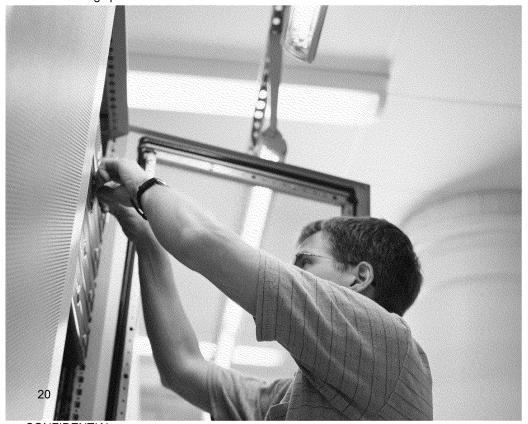
STORAGE SOLUTIONS GUIDE

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Enterprise Storage Solutions

With more than 30 years of experience and the broadest storage product portfolio available, Seagate consistently designs, builds and supports industry-leading enterprise hard drives, solid state drives and hybrid drives. Seagate has the global presence, processes and resources to support businesses of all sizes with the highest-quality enterprise storage products.



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		ENTERPRISE TURBOSSHD	ENTER PERFOR HC	MANCE	CHEETAH®	ENTERF CAPACIT		TERASCALE™ HDD/ CONSTELLATION® CS
	Legacy Name		Sav	⁄io [®]		Constell	lation	
	Application	Highest SFF Performance	SFF Perfo and Mair		LFF Performance	High Capa Low Po		Affordable High Capacity With Low Power
Product Comparison	Description	World's fastest hard drive	Highest-po highly reliabl 10K-RPM o hard drives in form t	le 15K- and enterprise n a 2.5-inch	High-performance, legacy 15K-RPM enterprise hard drive in a 3.5-inch form factor	High-capa power, n 7200-RPM e hard drive 2.5- and 3.5- facto	eliable enterprise in both inch form	High-capacity, eco-friendly, cost-effective storage forWeb-scale data centers
ပိ	Form Factor 2.5-inch		2.5-i	inch	3.5-inch	2.5-inch and	1 3.5-inch	3.5-inch
uct	Reliability	0.44% AFR	0.44% AFR		0.55% AFR	0.62% and 1.095% AFR		800,000 MTBF
rod	Capacity ¹	300GB to 900GB	300GB to 1200GB		300GB to 600GB	250GB t	o 4TB	1TB to 4TB
Ф	Power (Idle)	4.82/V to 5.3/V	4.4W to 5.3W		8.74W to 11.68W	2.52W to 7.7W		up to 4.59VV
	Format	5xxE, 4KN	512N, 5x	OE, 4KN	512N	512N,	5xxE	512E
	Interface	6Gb/s SAS	6Gb/s SAS	, 4Gb/s FC	6Gb/s SAS, 4Gb/s FC	6Gb/s SAS, S	ATA 6Gb/s	SATA 6Gb/s
	Limited Warranty ⁴	5 years	5 ye	ars	5 years	5 yea	ars	3 years
	Product	Enterprise Turbo SSHD	Enterprise Perfor- mance 15KHDD	Enterprise Perfor- mance 10KHDD	Cheetah 15K	Enterprise Capacity 3.5 HDD	Enter- prise Capacity 2.5 HDD	Terascale HDD/ Constellation CS
L	Vibration Tolerance for Multi-Drive Stabilization	Х	Х	Х	X	X	Х	X
Feature Comparison	PowerChoice [™] Optimized Idle Power Settings	Х	Х	X		X	X	X
Con	Self-Encrypting Drive (SED) ²	X	х	X	Х	X	Х	
ature	FIPS 140-2 SED Option ^{2,3}	Х	Х	Х	Х	Х	Х	
Fea	Instant Secure Erase	Х	Х	Х		Х	Х	Х
	Solid State Hybrid	Х						
	Energy-Saving Features	X	Х	х		Х	Х	Х
	RoHS Compliance	Х	Х	Х	Х	Х	Х	Х

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¹ One gigativite, or GB, equals one billion bytes and one tetabyte, or TB, equals one billion bytes when referring to drive capacity. 2 Self-Encypting Dive models may require TGO-compliant host or controller support. 3 Some PESI in review SelPS 140-2 Lett Certificate is think? Internation groups STM-Complicationers 1440-1440 vend him. 4 Warranty terms may vary based on usage. Consult your Seagate sales representable for warranty terms and conditions.

Enterprise Turbo SSHD

The Enterprise Turbo SSHD accelerates access to your most critical data with the world's fastest hard drive.

Key Advantages

- · Hard drive capacities with flash-based performance
- * Best economic combination of performance, endurance and capacity—best \$/IOPS enterprise HDD
- · Meets critical demands for performance, scalability, flexibility and high density in a 2.5-inch form factor
- * Automatically caches hot data to flash and absorbs write intensity by only promoting hot data
- · Nonvolatile cache to enable faster write response time and help ensure data integrity during power loss

Best-Fit Applications

- · Big data analytics
- · Databases (ERP and OLTP)
- · Virtual desktop infrastructure (VDI)
- · Web development and Web page delivery

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CAPACITY	5XX EMULATION MODEL	INTERFACE	CACHE
600GB	ST600MX0004	6Gb/s SAS	128MB
600GB	ST600MX00142	6Gb/s SAS	128MB
600GB	ST600MX0024 ^{2,3}	6Gb/s SAS	128MB
450GB	ST450MX0004	6Gb/s SAS	128MB
450GB	ST450MX00142	6Gb/s SAS	128MB
300GB	ST300MX0004	6Gb/s SAS	128MB
300GB	ST300MX00142	6Gb/s SAS	128MB

CAPACITY	4K NATIVE MODEL	INTERFACE	CACHE	
600GB	ST600MX0034	6Gb/s SAS	128MB	
600GB	ST600MX00442	6Gb/s SAS	128MB	
600GB	ST600MX0054 ^{2,3}	6Gb/s SAS	128MB	
450GB	ST450MX0034	6Gb/s SAS	128MB	
450GB	ST450MX0044 ²	6Gb/s SAS	128MB	_
300GB	ST300MX0034	6Gb/s SAS	128MB	
300GB	ST300MX00442	6Gb/s SAS	128MB	



Enterprise Performance 15K HDD

Seagate Enterprise Performance 15K HDDs leverage a 2.5-inch form factor to deliver pronounced performance advantages and power savings over legacy 3.5-inch drives.

Key Advantages

- * Stores 2× the Tier 1 data over previous generation without increasing drive count
- Enables Tier 1 applications to process transactions more
- * Best-in-class idle power for more efficient storage operations
- . Industry's highest MTBF at 2M hours
- * Self-Encrypting Drive (SED)2 and FIPS SED4 options cut IT drive retirement costs and help protect data at rest.

Best-Fit Applications

- · High-performance Tier 1 enterprise servers
- · Blade, rack and tower servers hosting transaction-based
- · Power- and space-constrained data centers
- · Compliance and data security initiatives



ENTERPRISE STORAGE

CAPACITY	5xx NATIVE MODEL	INTERFACE	CACHE
450GB	ST450MP0004	6Gb/s SAS	128MB
450GB	ST450MP00142	6Gb/s SAS	128MB
300GB	ST300MP0004	6Gb/s SAS	128MB
300GB	ST300MP00142	6Gb/s SAS	128MB

CAPACITY	5xx EMULATION MODEL	INTERFACE	CACHE
600GB	ST600MP0034	6Gb/s SAS	128MB
600GB	ST600MP00442	6Gb/s SAS	128MB
600GB	ST600MP005424	6Gb/s SAS	128MB
450GB	ST450MP0034	6Gb/s SAS	128MB
450GB	ST450MP00442	6Gb/s SAS	128MB
300GB	ST300MP0034	6Gb/s SAS	128MB
300GB	ST300MP00442	6Gb/s SAS	128MB

CAPACITY	4K NATIVE MODEL	INTERFACE	CACHE
600GB	ST600MP0064	6Gb/s SAS	128MB
600GB	ST600MP00742	6Gb/s SAS	128MB
600GB	ST600MP00842.4	6Gb/s SAS	128MB
450GB	ST450MP0064	6Gb/s SAS	128MB
450GB	ST450MP00742	6Gb/s SAS	128MB
300GB	ST300MP0064	6Gb/s SAS	128MB
300GB	ST300MP00742	6Gb/s SAS	128MB

¹ One gligabyte, or GB, equals one billion bytes and one terabyte, or TB, equals one billion bytes when referring to drive capacity.

2 Self-Broyphing Drives (SED) and FIPS 140-2 Validated drives are not available in all models or countries. May require TCD-compliant host or

³ FPS 140-2 in review. See FPS 140-2 Level 2 Certificate at http://cerc.nist.go//groups/STM/cmvp/documents/140-1/1401val2011.htm#1635. 4 FPS 140-2 in review. See FPS 140-2 Level 2 Certificate at http://cerc.nist.gov/groups/STM/cmvp/validation.htm#05

Enterprise Performance 10K HDD

Seagate Enterprise Performance 10K HDDs deliver the optimal balance of capacity, performance and power in a 10K-RPM, 2.5-inch enterprise drive.

Key Advantages

- · Highest-capacity enterprise SFF hard drive (up to 1.2TB)
- \cdot PowerChoice[™] technology reduces power consumption.
- · Protection Information (PI) detects corruption of data in flight between the host system and the drive4
- · Self-Encrypting Drive (SED)2 and FIPS 140-2 certified SED3 cut IT drive retirement costs and protect data at rest. FIPS options meet government encryption compliance standards.

Best-Fit Applications

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- · Mission-critical servers and external storage arrays
- · Power- and space-constrained data centers

STORAGE SOLUTIONS GUIDE

· Compliance or data security initiatives



		BESTERNA STATE OF THE STATE OF	
CAPACITY	5xx NATIVE MODEL	INTERFACE	CACHE
1200GB	ST1200MM00172	6Gb/s SAS	64MB
1200GB	ST1200MM0027 ^{2,3}	6Gb/s SAS	64MB
900GB	ST900MM00262	6Gb/s SAS	64MB
900GB	ST900MM0036 ^{2,3}	6Gb/s SAS	64MB
900GB	ST9900805SS	6Gb/s SAS	64MB
900GB	ST9900705SS	6Gb/s SAS	64MB
900GB	ST9900605SS ^{2,3}	6Gb/s SAS	64MB
900GB	ST9900805FC	4Gb/s FC	64MB
600GB	ST600MM00262	6Gb/s SAS	64MB
600GB	ST9600205SS	6Gb/s SAS	64MB
600GB	ST9600105SS ²	6Gb/s SAS	64MB
600GB	ST9600005SS ^{2,3}	6Gb/s SAS	64MB
600GB	ST9600205FC	4Gb/s FC	64MB
450GB	ST450MM00262	6Gb/s SAS	64MB
450GB	ST9450405SS	6Gb/s SAS	64MB
450GB	ST9450305SS*	6Gb/s SAS	64MB
450GB	ST9450205SS ^{2,3}	6Gb/s SAS	64MB
450GB	ST9450405FC	4Gb/s FC	64MB
300GB	ST300MM00262	6Gb/s SAS	64MB
300GB	ST9300605SS	6Gb/s SAS	64MB
300GB	ST9300505SS	6Gb/s SAS	64MB
300GB	ST9300405SS ^{2,3}	6Gb/s SAS	64MB
300GB	ST9300605FC	4Gb/s FC	64MB

Cheetah® 15K

The Seagate Cheetah 15K drive provides high performance and reliability in legacy 3.5-inch mission-critical storage.

Key Advantages

- · Sustained data rate of up to 204MB/s
- · Industry's highest 3.5-inch drive reliability
- · PowerTrim™ technology optimizes power consumption
- · Self-Encrypting Drive (SED)2 and FIPS 140-2 certified SED3 cut IT drive retirement costs and protect data. FIPS options meet government encryption compliance standards.

Best-Fit Applications

- · Business and transaction processing
- · Email and decision support
- · Storage Area Networks (SAN)
- · Network Attached Storage (NAS)
- · Internet and e-commerce



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CAPACITY'	5xx NATIVE MODEL	INTERFACE	CACHE
600GB	ST3600057SS	6Gb/s SAS	16MB
600GB	ST3600957SS ²	6Gb/s SAS	16MB
600GB	ST3600857SS ^{2,3}	6Gb/s SAS	16MB
600GB	ST3600057FC	4Gb/s FC	16MB
450GB	ST3450857SS	6Gb/s SAS	16MB
450GB	ST3450757SS ²	6Gb/s SAS	16MB
450GB	ST3450657SS ^{2,3}	6Gb/s SAS	16MB
450GB	ST3450857FC	4Gb/s FC	16MB
300GB	ST3300657SS	6Gb/s SAS	16MB
300GB	ST3300557SS ²	6Gb/s SAS	16MB
300GB	ST3300457SS ^{2,3}	6Gb/s SAS	16MB
300GB	ST3300657FC	4Gb/s FC	16MB

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Enterprise Capacity 3.5 HDD

The Seagate Enterprise Capacity 3.5 HDDs help data centers meet the demanding growth of unstructured data.

Key Advantages

- · Highest-capacity enterprise drive for maximum density server and storage solutions
- · SAS and SATA interfaces with 24x7 reliability
- · Predictable 7200-RPM performance even in the most rugged multi-drive environments
- · Improved power and cooling efficiencies with low power consumption and on-demand PowerChoice™
- · Protect your data and ease data disposal costs and management with the Self-Encrypting Drive (SED) and FIPS 140-2 certified SED2,3

Best-Fit Applications

- · High-capacity RAID storage
- · Mainstream enterprise external storage (SAN, NAS, DAS)
- · Cloud bulk data storage
- · Enterprise backup and restore—D2D, virtual tape

STORAGE SOLUTIONS GUIDE

· Centralized surveillance

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CAPACITY ¹	5xx NATIVE MODEL	INTERFACE	CACHE
4TB	ST4000NM0033	SATA 6Gb/s	128MB
4TB	ST4000NM00532	SATA 6Gb/s	128MB
4TB	ST4000NM0073 ^{2,3}	SATA 6Gb/s	128MB
4TB	ST4000NM0023	6Gb/s SAS	128MB
4TB	ST4000NM00432	6Gb/s SAS	128MB
4TB	ST4000NM00632.3	6Gb/s SAS	128MB
3ТВ	ST3000NM0033	SATA 6Gb/s	128MB
3ТВ	ST3000NM00532	SATA 6Gb/s	128MB
3ТВ	ST3000NM0023	6Gb/s SAS	128MB
3ТВ	ST3000NM00432	6Gb/s SAS	128MB
3ТВ	ST3000NM0063 ^{2,3}	6Gb/s SAS	128MB
2TB	ST2000NM0033	SATA 6Gb/s	128MB
2TB	ST2000NM00532	SATA 6Gb/s	128MB
2TB	ST2000NM0023	6Gb/s SAS	128MB
2TB	ST2000NIM00432	6Gb/s SAS	128MB
2TB	ST2000NM0063 ^{2,3}	6Gb/s SAS	128MB
1TB	ST1000NM0033	SATA 6Gb/s	128MB
1TB	ST1000NM00532	SATA 6Gb/s	128MB
1TB	ST1000NM0023	6Gb/s SAS	128MB
1TB	ST1000NM00432	6Gb/s SAS	128MB
1TB	ST1000NM0063 ^{2,3}	6Gb/s SAS	128MB

Constellation[®]

The Seagate Constellation drive is the only 2.5-inch enterprise-class hard drive delivering both 1TB capacities and enterprise reliability.

Key Advantages

- · Maximizes data center footprint
- · Energy-efficient storage at under 3.9W (idle)
- · Highest nearline reliability with an MTBF of 1.4M hours
- Self-Encrypting Drive (SED)² and FIPS 140-2 certified SED³ cut IT drive retirement costs and protect data.
- · FIPS options meet government encryption compliance standards.

Best-Fit Applications

- · Storage-hungry business applications
- · Storage area networks and network attached storage
- · Maximum-capacity servers and blade servers
- · Rich media content storage
- · Enterprise backup and restore—D2D, virtual tape
- · Cloud computing



ENTERPRISE STORAGE

CAPACITY	5xx NATIVE MODEL	INTERFACE	CACHE
1TB	ST91000640NS	SATA 6Gb/s	64MB
1TB	ST91000641NS ²	SATA 6Gb/s	64MB
1TB	ST91000642NS ^{2,4}	SATA 6Gb/s	64MB
1TB	ST91000640SS	6Gb/s SAS	64MB
1TB	ST91000641SS ²	6Gb/s SAS	64MB
1TB	ST91000642SS ^{2,4}	6Gb/s SAS	64MB
500GB	ST9500620NS	SATA 6Gb/s	64MB
500GB	ST9500621NS	SATA 6Gb/s	64MB
500GB	ST9500622NS ^{2,4}	SATA 6Gb/s	64MB
500GB	ST9500620SS	6Gb/s SAS	64MB
500GB	ST9500621SS ²	6Gb/s SAS	64MB
500GB	ST9500622SS ^{2,4}	6Gb/s SAS	64MB
250GB	ST9250610NS	SATA 6Gb/s	64MB
250GB	ST9250611NS	SATA 6Gb/s	64MB
250GB	ST9250612NS ^{2,4}	SATA 6Gb/s	64MB

¹ One graphyte, or CB, equals one billion bytes and one ferabyte, or TB, equals one frillion bytes when referring to drive capacity.

2 Set FEnopphing Drives (SED) and FPS 140-2 validated drives are not available in all modes or countries. May require TCG-compliant host or

Terascale[™] HDD Constellation[®]CS

The Seagate Terascale HDD and Constellation CS are designed for large Web-scale data centers where low-cost, low-power and high-capacity storage is critical.

Key Advantages

- Affordable storage for 24×7 multi-drive replicated environments
- High vibration tolerance for reliable enterprise-class performance
- Low power and cooling costs with the lowest 3.5-inch enterprise drive operating power
- Advanced format logical block management for industry-leading data integrity

Best-Fit Applications

- · Web-scale computing
- · Cloud storage servers and arrays
- · Cloud backup storage
- · Direct-attached external storage (DAS)

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· Network-attached storage (NAS)



CAPACITY!	5xx EMULATION MODEL	INTERFACE	CACHE
4TB	ST4000NC000°	SATA 6Gb/s	64MB
4TB	ST4000NC001	SATA 6Gb/s	64MB
зтв	ST3000NC002	SATA 6Gb/s	64MB
зтв	ST3000NC000°	SATA 6Gb/s	64MB
2TB	ST2000NC001	SATA 6Gb/s	64MB
2TB	ST2000NC0002	SATA 6Gb/s	64MB
1TB	ST1000NC001	SATA 6Gb/s	64MB
1TB	ST1000NC0002	SATA 6Gb/s	64MB



1 One gigatyte, or CB, equals one billion bytes and one terabyte, or TB, equals one trillion bytes when referring to drive capacity. 2 Seagate Instant Secure Erase Model

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STORAGE SOLUTIONS GUIDE

ENTERPRISE STORAGE

Desktop Storage Solutions

Seagate has a distinguished history in consistently delivering innovative technologies, super-sized capacities, low power and blazing-fast performance. Seagate desktop drives offer excellent performance at all levels.











DESKTOP STORAGE

		DESKTOP SSHD	DESKTOP SHOO INTERNAL KIT	DESKTOP HDD	DESKTOP 3.5 INCH INTERNAL KIT
	Legacy Name			Barracuda®	Barracuda
	Application	Performance	Performance	Mainstream	Mainstream
Product Comparison	Description	Solid state hybrid drive delivers SSD-like performance without sacrificing capacity	The easy way to upgrade or add storage capacity to desktop computers to get solid state speed for fast, responsive system performance	Tuned performance for low-power, mainstream and high-performance desktop computing	The fast, powerful and easy way to upgrade or add storage capacity to desktop computers
Ö	Capacity ¹	1TB to 4TB	1TB to 4TB	250GB to 4TB	500GB to 4TB
luct (Interface	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 3Gb/s, SATA 6Gb/s
100	Form Factor	3.5 inch	3.5 inch	3.5 inch	3.5 inch
<u>п</u>	Reliability	<1% AFR	<1% AFR	<1%AFR	<1% AFR
	Cache	64MB	64MB	16MB to 64M	16MB to 64M
	Power (Idle)	<3.3W to <3.9W	<3.3W to <3.9W	4.0W to 5.8W	
	Product	Desktop SSHD	Desktop S+DD Internal Kit	Deesktop HDD	Desktop 3.5 Inch Internal Kit
Comparison	OptiCache™ Technology			X	X
ıρa	Solid State Hybrid	Χ	X		
Con	Mounting Hardware and Cables		X		X
Feature	Compatible with Windows 82	X	X	X	Х
Fea	Energy-Saving Features	X	X	X	Х
	RoHS Compliance	X	X	X	Х

1 Cne gigabyte, or GS, equats one billion bytes and one tenabyte, or TE, equats one trillion bytes when referring to drive capacit 2 For a complete list of Seagaste products that are compatible with Windows 6, visit http://www.microcoft.com/en-us/windows-compatibility/with/ScompatiCenter-Forme

Desktop SSHD

Seagate Desktop SSHD (solid state hybrid drive) delivers SSD-like performance and massive capacities at an affordable price.

Key Advantages

- * First SSHD in a 3.5-inch form factor
- * SATA 6Gb/s with NCQ for interface speed
- Up to 3× faster than a traditional HDD²
- . All-in-one design for ease of installation
- · Installs and operates like a standard hard drive
- Massive 1TB or 2TB capacities combined with SSD-like performance²

Best-Fit Applications

- · Desktop PCs
- · Workstations
- · High-performance direct-attached storage (DAS) devices



CAPACITY	MODEL	INTERFACE	CACHE
4TB	ST2000DX001	SATA 6Gb/s	64MB
2TB	ST2000DX001	SATA 6Gb/s	64MB
1TB	ST1000DX001	SATA 6Gb/s	64MB

Desktop HDD

Seagate Desktop HDDs give you the Power of One with 1TB-per-disk technology and one drive platform for every capacity and application.

Key Advantages

- · Up to 4TB capacity
- AcuTrac[™] and OptiCache [™] technologies deliver dependable overall performance.
- · Free Seagate DiscWizard™ software

Best-Fit Applications

- · Desktop or all-in-one PCs and home servers
- · PC-based gaming systems
- · Direct-attached external storage devices (DAS)

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CAPACITY	MODEL	INTERFACE	CACHE
4TB	ST4000DM000	SATA 6Gb/s NCQ	64MB
3TB	ST3000DM001	SATA 6Gb/s NCQ	64MB
2TB	ST2000DM001	SATA 6Gb/s NCQ	64MB
1TB	ST1000DM003	SATA 6Gb/s NCQ	64MB
500GB	ST500DM002	SATA 6Gb/s NCQ	16MB
320GB	ST320DM000	SATA 6Gb/s NCQ	16MB
250GB	ST250DM000	SATA 6Gb/s NCQ	16MB

Desktop 3.5-Inch Internal Kit

Seagate 3.5-inch internal drives are the fast, powerful, and easy way to upgrade or add storage capacity to desktop computers.

Key Advantages

- · Quiet, ultra-high performance
- · DiscWizard™ software makes installation a snap
- Built-in self-monitoring technology helps ensure maximum reliability
- Desktop solid state hybrid model offers SSD-like performance with the capacity of a hard drive

Best-Fit Applications

- · Gaming PCs
- Workstations
- · High-end PCs
- · Desktop RAID
- · Mainstream/office PCs



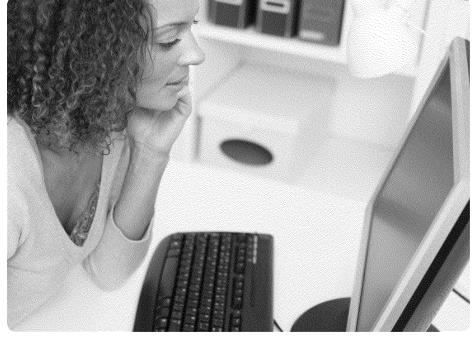


DESKTOP STORAGE

CAPACITY!	KIT NUMBER)	INTERFACE	CACHE
4TB	STBD4000400	SATA 6Gb/s	64MB
3ТВ	STBD3000100	SATA 6Gb/s	64MB
2TB	STBD2000101	SATA 6Gb/s	64MB
1TB	ST310005N1A1AS-RK	SATA 6Gb/s	64MB
500GB	ST3500641AS-RK	SATA 3Gb/s	64MB
PACKAGE	7.38-in L x 5.88-in W x 2	2.88-in D	

DESKTOP SSH	D MODEL		energy and the same
CAPACITY ¹	KIT NUMBER ⁹	INTERFACE	MLCFLASH
2TB	STCL2000400	SATA 6Gb/s	8 G B
PACKAGE DIMENSIONS	5.88-in L x 7.38-in V (149.35mm x 187.4		

(187mm x 149mm x 73mm)



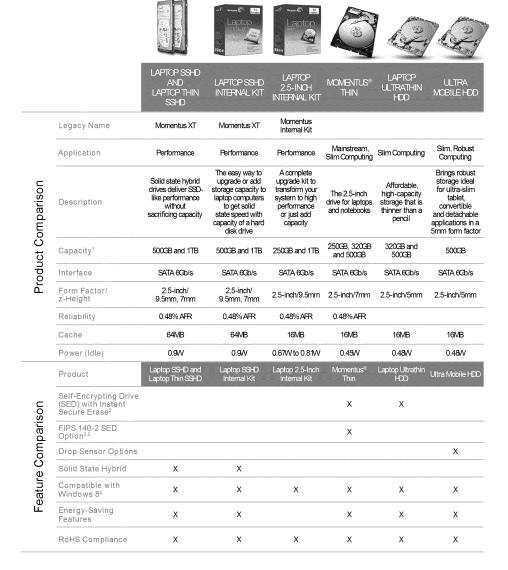
1 One gligabyte, or CB, equals one billion bytes and one tenabyte, or TB, equals one billion bytes when referring to drive capacity. 2 Performance may vary depending on user's hardware configuration and operating system.

2 Performance may vary depending on user's hardware configuration and operating system.
3US, model numbers shown
STORAGE SOLUTIONS GUIDE 33

Mobile Storage Solutions

Seagate laptop and tablet drives address every mobile market need, delivering superior performance, reliability and value. Feature-rich with innovative options, the Seagate mobile lineup also includes self-encryption and FIPS 140-2 validated models.





¹ One gloabyte, or GB, equals one billion bytes and one terabyte, or TB, equals one trillion bytes when referring to drive capacity

STORAGE SOLUTIONS GUIDE

MOBILE STORAGE

Code graphs in Chap, equals of an entire types at order leading in 1. to equal over the minor types with meeting an order leading.

2. Self-Encrypting Divine models may equal DC complaint fact or controller support.

3. Some FEST in eview. See FEST 40-2 Level 2 Certificate at http://ciscs.nist.gov/grapas/STM/compdocuments/140-1/140/hend.htm.

4. For a complete for despete products that are compatible with Windows 8, visit http://www.microsoft.com/en-us/windows/compat/bility/win8.Compat/Center-Informe

Laptop SSHD and Laptop Thin SSHD

The Seagate Laptop SSHD (1TB) and Laptop Thin SSHD (500GB) enable laptop PC users to enjoy solid state performance without sacrificing capacity.

Key Advantages

- · Boots and performs like an SSD2
- · Up to 4x faster than a traditional HDD2
- · SATA 6Gb/s with NCQ for interface speed
- · All-in-one design for simplicity and ease of installation
- · Works in any laptop or PC, any OS and any application
- · Backed by a 3-year limited warranty

Best-Fit Applications

- · Laptops and mobile workstations
- · Desktop and tower workstations
- · High-performance laptop and desktop gaming systems
- · Small form factor all-in-one PCs



CAPACITY	MODEL	INTERFACE	CACI+E
1TB	ST1000LM014	SATA 6Gb/s	64MB
500GB	ST500LM000	SATA 3Gb/s	64MB

Laptop Ultrathin HDD

The Seagate Laptop Ultrathin HDD is one of the thinnest and lightest laptop hard drives—5mm, 3.3 oz. and thinner than a pencil.

Key Advantages

- · Affordable, high-capacity storage gives system builder options when integrating low profile storage into slim laptop and ultrabook solutions
- · Compatible with every portable PC with a standard SATA 6Gb/s interface
- · Get industry-leading cost-per-GB and cost-per-millimeter
- · Seagate Secure™ Self-Encrypting Drive options3

Best-Fit Applications

- · Slim laptops or ultrabooks
- · Extending high-capacity, affordable storage into other applications and slim devices
- · Backup storage



MOBILE STORAGE

CAPACITY ¹	MODEL	INTERFACE	CACHE	
500GB	ST500LT032	SATA 6Gb/s	16MB	
500GB	ST500LT033*	SATA 6Gb/s	16MB	
320GB	ST320LT030	SATA 6Gb/s	16MB	Τ

Momentus® Thin

The 7mm, 2.5-inch drive enables slim computing for all types of mobile computing, from laptops to netbooks to smaller desktop PCs.

Key Advantages

- · 7mm z-height form factor enables thin chassis design for all segments of laptop computing.
- Seagate SmartAlign™ technology provides a transition to 4K sectors without the need for software utilities.
- · Self-Encrypting Drive3 options mitigate data breaches, comply with data protection regulations and preserve brand recognition.
- · Self-Encrypting Drive options with FIPS 140-2 certification4 are government-approved for the U.S. and Canadian governments.

Best-Fit Applications

- · Thin entry-level laptop PCs
- · Thin high-end netbooks
- · Thin ultraportables



CAPACITY ¹	MODEL	INTERFACE	CACHE
500GB	ST500LT025 ^{3,5}	SATA 6Gb/s	16MB
500GB	ST500LT015 ^{1,5}	SATA 6Gb/s	16MB
500GB	ST500LT012	SATA 6Gb/s	16MB
320GB	ST320LT0125	SATA 6Gb/s	16MB
250GB	ST250LT012 ⁵	SATA 6Gb/s	16MB

Ultra Mobile HDD

Just 5mm thin and supported by a stainless steel design, the Seagate Ultra Mobile HDD is ready for mobility.

Key Advantages

- * 500GB brings 7× more space to tablet applications at a fraction of the cost
- · Zero-gravity sensors provide extra drop protection.
- · Improved shock and tolerance for gyroscopic motion supports even the intense maneuvers of gamers
- * Just 3.3 oz-about the weight of a lightbulb
- * Couple with the Seagate Mobile Enablement Kit's Dynamic Data™ Driver for robust and responsive storage with no compromise to system battery life.

Best-Fit Applications

- Tablets
- · Convertible and detachable storage
- · Ultra-mobile, ultra-portable storage expansion apps

The gigatyte, or GB, equals one billion bytes and one tenabyte, or TB, equals one billion bytes when referring to drive capacity.
2 Her furnance may vary depending on user's hardware configuration and operating system. Testing performed on a Laptop SSHD 1TB and a Laptop in SSHD 5000B.

erula i upop mith Sahu 2000B. 3 Self-Empyling Drives (SED) are not available in all models or countries. May require TOG-compliant host or controller support. 4 See FFS 4492-Level 2 certificate at http://sox.rist.gov/groups/STM/comp/sbcuments/140-11/40/vend.htm. 5 Smart/Vign technology is not available on this model.

CAPACITY'	MODEL	INTERFACE	CACHE
500GB	ST500LT035	SATA 6Gb/s	16MB

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Laptop 2.5-Inch Internal Kit

Seagate 2.5-inch internal drives deliver vast amounts of storage for adding capacity or upgrading drives in laptop computers.

Key Advantages

- · Built for mobility
- · Preserves battery life
- · Large data cache
- · Outstanding performance
- · Laptop solid state hybrid model offers SSD-like performance with the capacity of a hard drive.

Best-Fit Applications

- · Replacement laptop drives
- · Laptop storage upgrades
- · High-end laptops and workstations

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CAPACITY ¹	KIT NUMBER?	INTERFACE	CACHE
1TB	STBD1000100	SATA 3Gb/s	8MB
500GB	ST905003N3A1AS-RK	SATA 3Gb/s	16MB
500GB	ST905003N1A1AS-RK	SATA 3Gb/s	8MB
250GB	ST90250N1A1AS-RK	SATA 3Gb/s	8MB
PACKAGE DIMENSIONS	6.25-in L x 4.75-in W x 2.25-in D (159mm x 121mm x 57mm)		

LAPTOP SSHD	MCDEL		
CAPACITY	KIT NUMBER?	INTERFACE	MLCFLASH
1TB	STBD1000400	SATA 6Gb/s	8GB
PACKAGE DIMENSIONS	6.25-in L x 4.75-in W x (159mm x 121mm x 57		



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STORAGE SOLUTIONS GUIDE

MOBILE STORAGE

Specialty Storage Solutions

Storage solutions for NAS, DVRs and surveillance systems

Seagate has the expertise to build drives optimized for specialty environments, like Network Attached Storage (NAS), CE and video storage. Our global presence, business partnerships, technology leadership and industry understanding enable Seagate to deliver industry-leading products.











SPECIALTY STORAGE

		NASHDD	SV35 SERIES™	VIDEO 3.5 HDD	VIDEO 2.5 HDD
	Legacy Name			Pipeline® HD	Pipeline HD Mini
	Application	Small NAS	Video Surveillance	Mainstream Œ-DVR	Small form factor OE-DVR
Product Comparison	Description	Best-performing, highest- capacity storage for 1- to 5-bay NAS systems	Optimized performance and improved reliability for video surveillance applications	Cool, quiet, low-power performance—perfect for high-definition consumer DVR applications	Cool, quiet, low power— perfect for small form factor and power-sensitive designs
пра	Capacity ¹	2TB to 4TB	1TB to 3TB	2500B to 4TB	250GB to 500GB
Con	Interface	SATA 6Gb/s	SATA 6Gb/s	SATA 3Gb/s, SATA 6Gb/s	SATA 3Gb/s
ţ	Form Factor	3.5-inch	3.5-inch	3.5-inch	2.5-inch
Produ	Simultaneous HD Streams Supported	_	_	up to 16	up to 12
	Reliability	1M hours MTBF	<1% AFR	0.55% AFR	0.55% AFR
	Cache	64MB	64MB	8MB to 64MB	16MB
	Power (Idle)	3.0W to 3.95W	3.36W to 5.4W (ldle2)	2.5W to 5.0W	0.66/V
Ē	Product	NASHDD	SV35 Series	Video 3.5 HDD	Video 2.5 HDD
riso	Cool Operation		x	x	x
ıpaı	24x7 Operation Capable	x	x	х	x
Feature Comparison	Extremely Low Vibration	X			
Пē	NASWorks™ Technology	х			
eatı	Energy-Saving Features	x		х	x
щ	RoHS Compliance	x	x	х	х

1 One gloabyte, or GB, equals one billion bytes and one terabyte, or TB, equals one trillion bytes when referring to drive capacity

NAS HDD

The Seagate NAS HDD fine-tunes the needs of 1- to 5-bay NAS systems to provide industry-leading performance and highest-capacity storage.

Key Advantages

- NASWorks™ technology supports custom error recovery controls, power management and vibration tolerance.
- NAS error recovery controls help to ensure drives are not dropped from the NAS and sent into a RAID rebuild.
- Improved vibration tolerance and emission in multi-drive systems with dual-plane balance
- Advanced power management supports multiple power profiles for low-power, 24×7 performance.

Best-Fit Applications

- · Home servers or desktop NAS solutions
- · Small-business file sharing
- · Backup servers



CAPACITY	MODEL	INTERFACE	CACHE
4TB	ST4000MN000	SATA 6Gb/s	64MB
3ТВ	ST3000VN0000	SATA 6Gb/s	64MB
2TB	ST2000VN000	SATA 6Gb/s	64MB

Video 3.5 HDD

Seagate Video 3.5 HDDs deliver unprecedented levels of acoustic, power and vibration performance with room for hundreds of your favorite movies.

Key Advantages

- Quiet drive operation to enhance customer viewing and listening experiences
- 75°C, 24-hour operation capable
- · Operational power consumption as low as 3.4W
- · 2.0A spin-up current limited

Best-Fit Applications

- · Consumer digital video recorders
- · Media servers and centers
- · Home theater PCs and servers
- · Cable, satellite and IPTV set-top boxes



SPECIALTY STORAGE

CAPACITY ¹	MODEL	INTERFACE	CACHE	
4TB	ST4000VM000	SATA 6Gb/s	64MB	
3ТВ	ST3000VM002	SATA 6Gb/s	64MB	
2TB	ST2000VM003	SATA 6Gb/s	64MB	
1TB	ST1000VM002	SATA 6Gb/s	64MB	
500GB	ST3500312CS	SATA 3Gb/s	8MB	
320GB	ST3320311CS	SATA 3Gb/s	8MB	
250GB	ST3250312CS	SATA 3Gb/s	8MB	

SV35 Series

The Seagate SV35 series drives optimize performance, save power and improve reliability for video surveillance applications.

Key Advantages

- · Higher areal density for cost-effective DVR applications
- · Performance-tuned for seamless video applications
- Enterprise-class reliability for 24x7 video surveillance applications
- · Built-in error recovery for non-stop streaming

Best-Fit Applications

- · Video surveillance digital video recorder
- · Video surveillance network digital video recorder
- · Direct-attached JBOD video surveillance storage
- · Network-attached JBOD video storage



CAPACITY	MODEL	INTERFACE	CACHE
зтв	ST3000VX000	SATA 6Gb/s	64MB
2TB	ST2000VX000	SATA 6Gb/s	64MB
1TB	ST1000VX000	SATA 6Gb/s	64MB

Video 2.5 HDD

Seagate Video 2.5 HDDs let you stream, record and play back your video content with unparalleled reliability and performance.

Key Advantages

- · Virtually silent streaming performance as low as 19dB
- Built for 24×7 operation and low power consumption
- Small, 2.5-inch form factor allows system cost reduction and operational power savings
- · Fanless design allows flexibility in a sleek system design.
- 0.55% AFR supports longevity in demanding consumer electronic environments.

Best-Fit Applications

- · DVR and media center applications
- · Home theater PCs
- · Karaoke and audio jukeboxes
- Cable, satellite and IPTV set-top boxes
- · In-camera or surveillance systems



CAPACITY	MODEL	INTERFACE	CACHE
500GB	ST500VT000	SATA 3Gb/s	16MB
320GB	ST320VT000	SATA 3Gb/s	16MB
250GB	ST250VT000	SATA 3Gb/s	16MB

42 STORAGE SOLUTIONS GUIDE 1. Once gigablyte, or CRI, equals one billion bytes and one tenabyte, or TRI, equals one billion bytes when referring to drive capacity.

STORAGE SOLUTIONS GUIDE 4.

Partner Resources and Benefits

The Seagate Partner Program (SPP) provides access to unique resources and benefits to help channel partners secure new opportunities and grow revenue and profitability.

As a registered SPP member, you enjoy the following exclusive features:

- · Password-protected portal
- · E-newsletter and regular news updates
- New product evaluation unit program
- · Training and sales tools
- · Priority support

Start reaping the rewards of SPP membership—register today at www.seagate.com/www/partners

- · Complete the online form.
- · Click through and accept our standard agreement.



Service and Support

For information regarding products and services, visit www.seagate.com/about/contact-us/technical-support

Available services include:

- · Presales and Technical Support
- Global Support Services telephone numbers and business hours
- · Authorized Seagate Service Centers

For information regarding Warranty Support,

visit www.seagate.com/support/ warranty-and-returns

For information regarding Data Recovery Services, visit www.seagate.com/

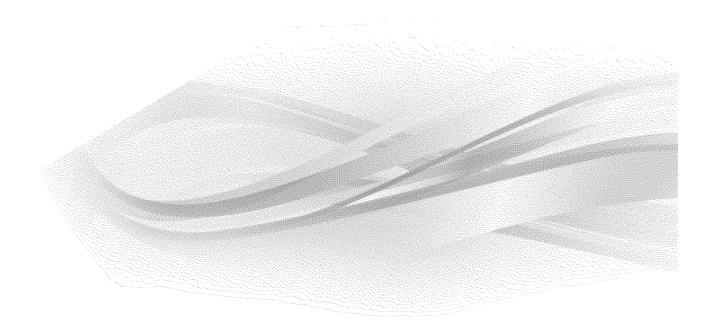
services-software/

For Seagate OEM and Distribution partner portal, visit www.seagate.com/www/partners

For Seagate reseller portal, visit www.seagate.com/www/partners



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